RESTORATION INFORMATION MANAGEMENT SYSTEM
FORMERLY USED DEFENSE SITES (FUDS)
PROJECT FACT SHEET
AUGUST 1996
TAG REVIEW DATE: 12 JUNE 1997

1. **SITE NAME:** Watertown Air-to-Ground Gunnery Range

SITE NUMBER: B08SD087200

LOCATION:
City: N/A
County: Marshall
State: South Dakota

PROJECT NUMBER: B08SD087201

CATEGORY: OE

INPR RAC: 4

ASR RAC: 4

TAG RAC: 3

2. **POC's:**

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ASR REVIEW POC:
Name: Sally Parsons
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3. **SITE DESCRIPTION:** The former Watertown Air-to-Ground (ATG) Gunnery Range consists of 7,312 acres located approximately 10 miles southeast of Britton, South Dakota. It was also known as Ft. Sisseton Precision Bombing Range. The INPR Team stated that current landowners reported seeing (over the years) large numbers of metal bombshell fragments and some small caliber shells on the

roughly two mile by six mile tract, but they had collected most of these and none were observed during the site visit. The INPR Team reported seeing a number of craters (small earth depressions) in the area which landowners indicated was most heavily bombed. The ASR Team reports that the site is hilly with numerous sloughs (shallow lakes). Most of the site is privately-owned rangeland, but approximately 480 acres is part of Fort Sisseton State Park. Part of the site is fenced, but a large part is accessible by foot or vehicle.

4. SITE HISTORY: In November 1942, the War Department authorized the acquisition of land for the Watertown ATG Gunnery Range in support of the Watertown Satellite Air Field. However the Army Air Corps felt the Watertown ATG Range was too small for air-to-ground gunnery and the Second Air Force converted the site to a precision bombing range (PBR).

In 1943, the Army Corps of Engineers erected three towers on the southern end of the range, southwest of the old historic buildings at Fort Sisseton, for triangulation scoring of bombing practice. The Army Air Corps used the range for training using practice bombs for over a year.

In May 1944, the Army Air Corps discontinued use of the Watertown ATG Gunnery Range. The War Department declared it surplus effective 14 August 1945 and the federal government canceled all leases for the site by June 1946. Certificates of Clearance were issued on December 1945 and August 1950.

5. PROJECT DESCRIPTION:

Size, Acres:	7,312
Former Use:	Gunnery range?/bombing range
Present Use:	Cattle ranching, agriculture, state park
Probable End Use:	Same as present
Ordnance Presence:	Confirmed
Type:	Bomb fragments, expended .50 cal. ammo

6. CURRENT STATUS: A draft Archive Search Report was completed by the U.S. Army Corps of Engineers, St. Louis District, in August 1996.

7. STRATEGY: OE EE/CA

8. ISSUES AND CONCERNS:

ASR vs HNC Safety Recommendation: The ASR Team recommends NOFA because they believe that any remaining practice bombs on this site are most probably under water. HNC Safety cited an ASR paragraph which states that the bombs made depressions 4 to 5

feet deep. For this reason, HNC Safety included HE bombs on the RAC worksheet which resulted in a RAC 3.

Gunnery Range: The ASR does not make clear if the Army ever used this site as an air-to-ground gunnery range before deciding that Watertown ATG gunnery range was too small and changing it to a bombing range.

Site Inspection: The execution of the site inspection was hindered by crops, tall grasses and the abnormally high water levels. The site is, and has been inundated with exceptionally high water, reportedly for the past five years.

Location of targets: The location and layout of the target footings suggest that the bombing target was located in the area south of Mallard Slough, centered on Sections 9 and 10. Landowners note that this is where they have recovered most of the practice bomb remnants. They further state that any practice bombs recovered in recent years have been retrieved from the bottom of the sloughs. Other items include expended .50 caliber rounds and dummy rounds.

Ecology: There are known Federally- and State-listed species occurring in the site area. An on-site inspection by appropriate State and Federal personnel may be necessary to verify the presence, absence or location of listed species, or natural communities. See paragraph 3.5 in the Findings for a listing of listed species.

9. SCHEDULE SUMMARY:

Phase	Orig. Sch. Start	Sch. Start	Actual Start	Orig. Comp	Sch. Comp	Actual Comp
EE/CA						

10. FUNDING/BUDGET SUMMARY:

Year	Phase	Exec FOA	In-House Required	Contract Required	Funds Obligated
1	EE/CA		$ 50,000	$ 500,000	
2	RD		$ 50,000		
3	RA		$150,000	$4,000,000	

ED-ES provides estimates of EE/CAs based on number of samples, size of area, plan of action, etc. This is a programming estimate to be used for programming project start in appropriate FY.

17 March 1995
Previous editions obsolete

APPENDIX B
RISK ASSESSMENT PROCEDURES FOR ORDNANCE AND EXPLOSIVE WASTE (OEW) SITES

Site Name: Watertown ATG Gun Range
Site Location: Marshall City, SD
DERP Project #: I08SD087201
Date Completed: 31 Oct 96
Rater's Name: Douglas F. Rhodes
Phone No.: (205) 895-1591
Organization: CEHNC-OE-EM-D
Score: 5

OEW RISK ASSESSMENT:

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The RAC score will be used by CEHND to prioritize the remedial action at Formerly Used Defense Sites. The risk assessment should be based upon best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) detachment actions, and field observations, interviews, and measurements. This information is used to assess the risk involved based upon the potential EXO hazards identified at the site. The risk assessment is composed of two factors, **hazard severity and hazard probability**. Personnel involved in visits to potential OEW sites should view the CEHND videotape entitled "A Life Threatening Encounter: OEW."

Part I. Hazard Severity. Hazard severity categories are defined to provide a qualitative measure of the worst credible mishap resulting from personnel exposure to various types and quantities of unexploded ordnance items.

TYPE OF ORDNANCE
(Circle all values that apply)

A.	Conventional Ordnance and Ammunition	VALUE
	Medium/Large Caliber (20 mm and larger)	10
	Bombs, Explosive	(10)
	Grenades, Hand and Rifle, Explosive	10
	Landmines, Explosive	10
	Rockets, Guided Missiles, Explosive	10
	Detonators, Blasting Caps, Fuzes, Boosters, Bursters	6
	Bombs, Practice (w/spotting charges)	(6)
	Grenades, Practice (w/spotting charges)	4
	Landmines, Practice (w/spotting charges)	4
	Small Arms, Complete Round (.22 cal - .50 cal)	1
	Small Arms, Expended	(0)
	Conventional Ordnance and Ammunition (Select the largest single value)	10

What evidence do you have regarding conventional EXO? ASR indicated large depressions which I don't believe could have been made by only practice bombs.

B. Pyrotechnics (For munitions not described above.)

	VALUE
Munition (Container) Containing White Phosphorus (WP) or other Pyrophoric Material (i.e., Spontaneously Flammable)	10
Munition Containing A Flame or Incendiary Material (i.e., Napalm, Triethylaluminum Metal Incendiaries)	6
Flares, Signals, Simulators, Screening Smokes (other than WP)	4
Pyrotechnics (Select the largest single value)	0

What evidence do you have regarding pyrotechnics? See ASR

C. Bulk High Explosives (Not an integral part of conventional ordnance; uncontainerized.)

	VALUE
Primary or Initiating Explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition Charges	10
Secondary Explosives (PETN, Compositions A, B, C, Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military Dynamite	6
Less Sensitive Explosives (Ammonium Nitrate, Explosive D, etc.)	3
High Explosives (Select the largest single value)	0

What evidence do you have regarding bulk explosives? See ASR

D. Bulk Propellants (Not an integral part of rockets, guided missiles, or other conventional ordnance; uncontainerized)

	VALUE
Solid or Liquid Propellants	6
Propellants	0

What evidence do you have regarding bulk explosive See ASR

E. Chemical Warfare Materiel and Radiological Weapons

	VALUE
Toxic Chemical Agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification Sets	20
Radiological	15
Riot Control Agents (Vomiting, Tear)	5
Chemical and Radiological (Select the largest single value)	0

What evidence do you have of chemical/radiological OEW? See ASR

TOTAL HAZARD SEVERITY VALUE

(Sum of Largest Values for A through E--Maximum of 61)
Apply this value to Table 1 to determine Hazard Severity Category.

TABLE 1
HAZARD SEVERITY*

Description	Category	Hazard Severity Value
CATASTROPHIC	I	21 and greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE		0

* APPLY HAZARD SEVERITY CATEGORY TO TABLE 3.

**IF HAZARD SEVERITY VALUE IS 0, YOU DO NOT NEED TO COMPLETE PART II. PROCEED TO PART III AND USE A RAC SCORE OF 5 TO DETERMINE YOUR APPROPRIATE ACTION.

Part II. Hazard Probability. The probability that a hazard has been or will be created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used DOD site.

AREA, EXTENT, ACCESSIBILITY OF OEW HAZARD
(CIRCLE ALL VALUES THAT APPLY)

A. Locations of OEW Hazards

	VALUE
On the surface	5
Within Tanks, Pipes, Vessels or Other confined locations.	4
Inside walls, ceilings, or other parts of Buildings or Structures.	3
Subsurface	(2)

Location (Select the single largest value) 2

What evidence do you have regarding location of OEW? See ASR RAC

B. Distance to nearest inhabited locations or structures likely to be at risk from OEW hazards (roads, parks, playgrounds, and buildings).

	VALUE
Less than 1250 feet	5
1250 feet to 0.5 miles	4
0.5 miles to 1.0 mile	(3)
1.0 mile to 2.0 miles	2
Over 2 miles	1

Distance (Select the single largest value) 3

What are the nearest inhabited structures? See ASR RAC

C. Numbers of buildings within a 2 mile radius measured from the OEW hazard area, not the installation boundary.

	VALUE
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	(2)
1 to 5	1
0	0

Number of Buildings (Select the single largest value) 2

Narrative See ASR RAC

D. Types of Buildings (within a 2 mile radius)

	VALUE
Educational, Child Care, Residential, Hospitals, Hotels, Commercial, Shopping Centers	5
Industrial, Warehouse, etc.	4
Agricultural, Forestry, etc.	(3)
Detention, Correctional	2
No Buildings	0

Types of Buildings (Select the largest single value) 3

Describe types of buildings in the area. See ASR RAC

E. Accessibility to site refers to access by humans to ordnance and explosive wastes. Use the following guidance:

BARRIER	VALUE
No barrier or security system	(5)
Barrier is incomplete (e.g., in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing.	4
A barrier, (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site.	3
Security guard, but no barrier	2
Isolated site	1
A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel) which continuously monitors and controls entry onto the facility; or An artificial or natural barrier (e.g., a fence combined with a cliff), which completely surrounds the facility; and a means to control entry, at all times, through the gates or other entrances to the facility (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the facility).	0

Accessibility (Select the single largest value) 5

Describe the site accessibility. See ASR RAC

F. Site Dynamics - This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion by beaches or streams, increasing land development that could reduce distances from the site to inhabitated areas or otherwise increase accessability.

	VALUE
Expected	5
None Anticipated	(0)

Site Dynamics (Select largest value) (0)

Describe the site dynamic See ASR RAC

TOTAL HAZARD PROBABILITY VALUE

(Sum of Largest Values for A through F–Maximum of 30)
Apply this value to Hazard Probability Table 2 to determine
Hazard Probability Level.

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TABLE 2
HAZARD PROBABILITY

Description	Level	Hazard Probability Value
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

* Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table 3. Enter with the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level		FREQUENT A	PROBABLE B	OCCASIONAL C	REMOTE D	IMPROBABLE E
Severity Category:						
CATASTROPHIC	I	1	1	2	3	4
CRITICAL	II	1	2	3	4	5
MARGINAL	III	2	3	4	4	5
NEGLIGIBLE	IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

RAC 1	Expedite INPR, recommending further action by CEHND - Immediately call CEHND-OE-ES - Commercial 205-895-1582
RAC 2	High priority on completion of INPR - Recommend further action by CEHND.
RAC 3	Complete INPR - Recommend further action by CEHND.
RAC 4	Complete INPR - Recommend further action by CEHND.
RAC 5	Usually indicates that no further action (NOFA) is necessary. Submit NOFA and RAC to CEHND.

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Part IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

ASR supports RAC score of 3 based upon information included in the ASR